

LAKE WASHINGTON BASIN

1

12128000 THORNTON CREEK NEAR SEATTLE, WA

LOCATION.--Lat $47^{\circ}41'45''$, long $122^{\circ}16'30''$, in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.26 N., R.4 E., King County, Hydrologic Unit 17110012, on left bank, at highway crossing, 1.5 mi north of Seattle city limits, and at mile 0.25.

DRAINAGE AREA.--12.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1945 to September 1946, May 1961 to September 1968, March 1996 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 40 ft above sea level, from topographic map. June 1945 to September 1946 at datum 0.09 ft higher.

REMARKS.--Records good except for periods of estimated daily discharge, which are poor. Intermittent regulation and diversions. Natural flow affected by urbanization and flood-control catchments.

AVERAGE DISCHARGE.--12 years (water years 1946, 1962-68, 1997-2000), 12.5 ft³/s, 14.03 in/yr, 9,050 acre-ft/yr.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 423 ft³/s Dec. 31, 1996, gage height, 5.26 ft; minimum daily discharge, 0.39 ft³/s Sept. 22, 1999.EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft³/s Dec. 12, gage height, 2.30 ft, maximum gage height, 3.15 ft (result of temporary fishtrap on Weir) May 3; minimum discharge, 0.84 ft³/s Sept. 8.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	7.9	22	14	38	17	7.6	6.7	5.8	4.0	3.6	4.8
2	5.2	6.6	23	9.0	17	22	7.7	8.7	5.1	3.8	3.7	4.3
3	5.5	6.3	14	13	13	16	7.6	e44	4.9	3.7	3.7	3.8
4	5.1	5.8	12	26	11	30	e28	4.8	4.7	3.5	4.5	
5	4.7	6.4	18	11	10	15	9.7	7.6	4.8	3.7	3.5	4.6
6	4.2	20	30	9.1	13	12	12	7.9	5.1	4.4	3.7	4.2
7	4.1	7.7	18	10	16	11	8.5	7.7	5.2	3.3	3.6	4.6
8	28	15	22	22	32	10	8.0	10	5.0	3.4	4.0	5.0
9	18	39	28	29	20	11	7.7	17	5.1	3.6	3.5	5.4
10	7.9	32	15	22	14	11	7.6	8.5	4.9	3.7	3.4	11
11	5.4	36	15	19	12	12	7.6	8.6	5.4	3.8	3.4	5.6
12	5.4	49	32	16	11	9.4	8.2	9.7	18	3.3	3.5	4.8
13	6.0	31	22	22	11	15	11	5.8	6.4	3.5	2.5	4.4
14	6.3	17	16	33	19	21	15	5.4	6.5	3.7	1.9	4.9
15	5.8	15	26	21	16	13	9.4	4.9	5.7	3.1	2.9	3.8
16	5.7	20	19	22	12	20	8.2	5.1	4.8	3.5	4.6	4.2
17	5.7	25	25	16	10	16	7.9	4.7	4.7	3.3	3.3	4.4
18	5.7	13	18	12	9.3	18	7.8	8.9	9.5	3.7	6.9	4.4
19	5.6	20	18	10	9.6	12	7.9	11	6.3	3.3	5.1	5.4
20	5.7	24	12	17	9.3	10	7.3	5.7	4.8	3.1	4.3	5.2
21	5.6	27	9.7	21	16	9.2	7.1	7.0	4.4	3.5	4.6	4.4
22	5.4	15	9.3	12	24	15	8.5	7.0	4.3	5.7	3.8	5.0
23	5.6	12	8.6	e10	16	11	8.1	5.2	4.1	7.9	3.7	4.4
24	5.6	26	8.4	e9.0	11	10	8.9	5.4	4.0	4.4	3.9	4.3
25	9.6	36	8.1	e14	15	9.4	11	5.0	3.9	3.9	4.0	4.8
26	6.2	27	8.0	e11	14	9.1	7.3	9.1	3.7	3.7	4.0	3.8
27	13	22	7.5	e9.0	22	9.1	7.1	9.7	3.5	3.6	4.2	4.5
28	17	17	7.4	e8.0	12	15	7.3	5.8	3.8	3.7	4.6	4.4
29	7.3	17	7.6	8.0	26	13	6.5	7.2	3.4	3.8	5.2	11
30	7.6	25	7.5	8.1	---	9.1	6.6	8.2	3.7	3.7	6.2	24
31	21	---	19	11	---	8.4	---	7.2	---	3.7	4.6	---
TOTAL	246.9	620.7	506.1	474.2	459.2	419.7	259.1	292.7	161.6	120.2	123.4	169.9
MEAN	7.96	20.7	16.3	15.3	15.8	13.5	8.64	9.44	5.39	3.88	3.98	5.66
MAX	28	49	32	33	38	30	15	44	18	7.9	6.9	24
MIN	3.0	5.8	7.4	8.0	9.3	8.4	6.5	4.7	3.4	3.1	1.9	3.8
AC-FT	490	1230	1000	941	911	832	514	581	321	238	245	337
CFSM	.66	1.71	1.35	1.26	1.31	1.12	.71	.78	.45	.32	.33	.47
IN.	.76	1.91	1.56	1.46	1.41	1.29	.80	.90	.50	.37	.38	.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

MEAN	10.3	15.8	18.6	20.5	18.6	16.8	12.7	9.44	8.08	6.14	5.91	7.81
MAX	18.0	29.8	30.7	36.2	45.0	34.4	25.8	13.8	15.1	10.1	10.1	17.3
(WY)	1946	1946	1946	1946	1946	1946	1946	1946	1964	1946	1945	1945
MIN	7.36	7.96	10.2	13.1	11.1	10.2	8.64	6.91	3.62	3.26	1.79	1.27
(WY)	1999	1968	1998	1963	1962	1965	2000	1968	1997	1996	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1945 - 2000
ANNUAL TOTAL	4315.03	3853.7	
ANNUAL MEAN	11.8	10.5	
HIGHEST ANNUAL MEAN			23.0 1946
LOWEST ANNUAL MEAN			10.2 1998
HIGHEST DAILY MEAN	49 Nov 12	49 Nov 12	129 Dec 31 1996
LOWEST DAILY MEAN	.39 Sep 22	1.9 Aug 14	.39 Sep 22 1999
ANNUAL SEVEN-DAY MINIMUM	.52 Sep 9	3.0 Aug 9	.52 Sep 9 1999
ANNUAL RUNOFF (AC-FT)	8560	7640	9050
ANNUAL RUNOFF (CFSM)	.98	.87	1.03
ANNUAL RUNOFF (INCHES)	13.27	11.85	14.03
10 PERCENT EXCEEDS	26	22	23
50 PERCENT EXCEEDS	8.8	7.9	9.3
90 PERCENT EXCEEDS	.86	3.7	4.7

e Estimated